

I-405 Bellevue Nickel Improvement Project I-90 to Southeast 8th Street

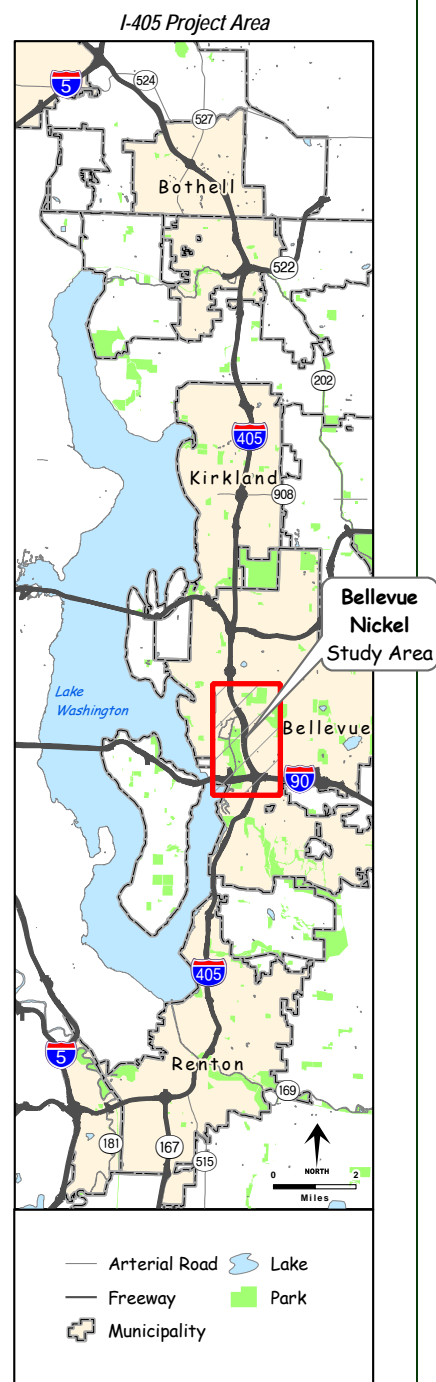


Corridor Program

Congestion Relief & Bus Rapid Transit Projects

SECTION 4(f) RESOURCES DISCIPLINE REPORT

January 2006



This document should be cited as:

Washington State Department of Transportation. 2005. I-405 Bellevue Nickel Improvement Project. Section 4(f) Evaluation. December. Bellevue, WA. Prepared for the Washington State Department of Transportation, Urban Corridors Office, and the Federal Highway Administration, Olympia, WA.



Title VI

WSDOT ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding WSDOT's Title VI Program, you may contact the Department's Title VI Coordinator at 360. 705.7098.

Americans with Disabilities Act (ADA) Information

If you would like copies of this document in an alternative format -- large print, Braille, cassette tape, or on computer disk, please call 360.705.7097. Persons who are deaf or hard of hearing, please call the Washington State Telecommunications Relay Service, or Tele-Braille at 7-1-1, Voice 1.800.833.6384, and ask to be connected to 360.705.7097.

This page is blank for double-sided copying.

Table of Contents

| | |
|---|-----------|
| Introduction | 1 |
| What alternatives do we analyze in this discipline report? | 3 |
| What is the No Build Alternative? | 3 |
| What are the principal features of the Build Alternative? | 3 |
| What is Section 4(f)? | 13 |
| What are Section 4(f) resources? | 13 |
| What constitutes a “use” of Section 4(f) resources? | 14 |
| When would a constructive use occur? | 15 |
| How do we decide if the project will affect 4(f) resources? | 16 |
| What resources might be affected? | 16 |
| Mercer Slough Nature Park | 19 |
| Environmental Education Center | 20 |
| Lake-to-Lake Trail and Greenway | 20 |
| Kelsey Creek Park | 20 |
| Norwood Village | 21 |
| Wilburton Trestle | 21 |
| Potential Effects | 23 |
| How will the project use 4(f) resources? | 23 |
| Mercer Slough Nature Park | 23 |
| Environmental Education Center | 24 |
| Lake-to-Lake Trail and Greenway | 25 |
| Kelsey Creek Park | 25 |
| Norwood Village | 26 |
| Wilburton Trestle | 27 |
| Are there feasible and prudent alternatives that would avoid use of the Section 4(f) properties? | 28 |
| What measures did we include in the project to minimize harm to the Section 4(f) resources? | 28 |
| What measures have we proposed to mitigate for unavoidable use of Section 4(f) resources? | 28 |
| Studies and Coordination | 29 |
| With which agencies/persons did we coordinate concerning avoidance alternatives, effects, measures to minimize harm, joint development (if applicable), and so forth? | 29 |
| Summary | 31 |
| What conclusions have we reached? | 31 |

References.....33

Exhibits

Exhibit 1. Project Vicinity Map 2

Exhibit 2. Proposed Bellevue Nickel Project Improvements (Sheet 1 of 3) 5

Exhibit 3. Proposed Bellevue Nickel Project Improvements (Sheet 2 of 3) 6

Exhibit 4. Proposed Bellevue Nickel Project Improvements (Sheet 3 of 3) 7

Exhibit 5. Proposed Wetland Mitigation Area 11

Exhibit 6. Conceptual Stream Mitigation Plan 12

Exhibit 7. Resources in the Study Area and Section 4(f) Criteria 17

Exhibit 8. Section 4(f) Resources in the Study Area 18

Exhibit 9. Mercer Slough Nature Park, Trails, and Environmental Education Center 19

Exhibit 10. Noise Receptors..... 23

Exhibit 11. Modeled Noise Levels at Receptors 34, 35, and 40..... 24

Appendices

Appendix A. Avoidance and Minimization Measures

Appendix B. Consultation with the City of Bellevue

Glossary

| | |
|--|--|
| A-weight | A standard frequency weighting that simulates how humans perceive sound (dBA). |
| adverse effect | A term that may apply to a property which is on or eligible for the National Register of Historic Places, adverse effect refers to diminishing a property's integrity with respect to its location, design, setting, materials, workmanship, feeling, or association. The term is applied by federal agency officials, in consultation with the State (or Tribal) Historic Preservation Officer, as part of the Section 106 process. |
| best management practice (BMP) | Method that has been determined to be the most effective, practical means of preventing or reducing pollution from a non-point source. |
| constructive use | A type of indirect use in which a transportation project's proximity impacts (as opposed to direct impacts/effects) are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Examples include excessive noise level increases, diminished aesthetic features, ecological intrusions, and other indirect impacts to the resource's environment or utility. |
| cultural resources | Any historic (or prehistoric) district, site, building, structure, or object that is either listed or eligible for listing on the National Register of Historic Places. Examples include such items as artifacts, records, structures, and remains. |
| decibel | The decibel (dB) is used to measure sound level and is a logarithmic unit. |
| easement | An easement is a limited right to make use of a property owned by another. |
| eligible | Refers to properties that meet the National Park Service criteria for listing on the National Register of Historic Places. |
| extraordinary magnitude | A reference to exceedingly high costs or other objectionable factors associated with a project alternative, extraordinary magnitude characterizes the effects to Section 4(f) or non-Section 4(f) resources as beyond the boundaries of feasible and prudent. |
| feasible and prudent | <p>A term that is integral to the Section 4(f) process, feasible and prudent refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term "feasible" refers to the constructability of a project—whether or not it can be built using current construction methods, technologies, and practices. The term "prudent" refers to how reasonable the alternative is—in essence, whether or not it makes sense. Given a range of options, a transportation agency must select an avoidance alternative rather than adversely impact Section 4(f) resources if it is feasible and prudent. By contrast, an alternative may be rejected if it is not feasible and prudent. An alternative may be considered not feasible and prudent for any of the following reasons:</p> <ul style="list-style-type: none"> does not meet project purpose and need excessive cost of construction severe operational or safety problems unacceptable impacts (social, economic or environmental) serious community disruption a combination of any of the above |
| Federal Highway Administration (FHWA) | One of several agencies in the U.S. Department of Transportation, the FHWA provides federal financial assistance to the states through the Federal Aid Highway Program, the purpose of which is to construct and improve the National Highway System, urban and rural roads, and bridges. |

Glossary

| | |
|---|--|
| Land and Water Conservation Fund Act (LWCFA) | Passed by Congress in 1965, the Act established the Land and Water Conservation Fund, a matching-fund assistance program that provides grants that pay half the acquisition and development cost of outdoor recreation sites and facilities. Section 6(f) of the act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of the Interior's (DOI's) National Park Service. The DOI must ensure that replacement lands of equal value, location, and usefulness are provided as a condition of such conversions. Consequently, where conversions of Section 6(f) lands are proposed for highway projects, replacement lands are required. |
| legal sufficiency review | A review that is required by the Federal Highway Administration for final environmental impact statements (EISs) and final Section 4(f) evaluations. The purpose of the review is to ensure that Section 4(f) and NEPA requirements have been met and are legally defensible. A legal sufficiency review is not a technical review; rather, it is a review of Section 4(f) and NEPA documentation and compliance efforts, and an attempt to make sure that these efforts comply with the law. |
| memorandum of agreement (MOA) | Official documentation specifying the terms of agreement between government agencies regarding work to be completed. |
| minimization | Minimization involves measures developed during the planning phase of a project to reduce proposed effects to a resource. Minimization measures could include alignment shifts, a commitment to off-season construction, replacement of land or facilities, restoration or landscaping, or payment of fair market value for affected lands. |
| mitigation | An effort to replace land or facilities either with resources that are comparable in value and function, or with monetary compensation that can be used to enhance the remaining land. The cost of mitigation should be a reasonable public expenditure in light of the severity of the effect on the Section 4(f) resource. |
| National Environmental Policy Act (NEPA) | The National Environmental Policy Act of 1969 (NEPA) is considered to be the basic "National Charter" for protection of the environment. NEPA requires that, to the extent possible, the policies, regulations, and laws of the federal government be interpreted and administered in accordance with the protection goals of the law. It also requires federal agencies to use an interdisciplinary approach in planning and decision making for actions that affect the environment. Finally, NEPA requires the preparation of an environmental impact statement (EIS) on all major federal actions significantly affecting the human environment. |
| National Historic Preservation Act (NHPA) | A federal law established in 1966, the NHPA requires federal agencies to consider the effects of their undertakings on historic properties and provide the Advisory Council on Historic Preservation with an opportunity to comment on such undertakings. Section 106 of the National Historic Preservation Act mandates consideration of a project's effect on historic resources in much the same way as Section 4(f). Because of their similarities, the relationship between Sections 4(f) and 106 is a common source of confusion. The most important connection between the two statutes is that the Section 106 process is generally the method by which a cultural resource's significance is determined for a federal undertaking under Section 4(f). |

Glossary

| | |
|---|---|
| National Park Service (NPS) | An agency within the U.S. Department of the Interior, the NPS preserves the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of current and future generations. The NPS is keeper of the National Register of Historic Places. Under Section 6(f) of the Land and Water Conservation Fund Act, the NPS reviews land conversions for transportation projects that require replacement lands. |
| National Register of Historic Places (NRHP) | The Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The National Park Service administers the National Register, which is part of the U.S. Department of the Interior. |
| official with jurisdiction | The legal representative at the agency owning or administering the resource, unless the agency has delegated or relinquished this authority via formal agreement. |
| programmatic evaluation | Programmatic Section 4(f) evaluations can be used in place of individual evaluations for highway projects where uses of the Section 4(f) resource are considered minor. The primary advantage of a programmatic evaluation is that it saves time. Unlike an individual evaluation, a programmatic evaluation does not require a draft, a comment period, or circulation, because its framework and basic approach has already been circulated and agreed upon by the US Department of the Interior (DOI). Project specific details are then applied to the programmatic evaluation to determine whether or not it can be used. Programmatic evaluations are usually approved much faster than individual evaluations. |
| proximity impacts | See "Constructive Use." |
| prudent | See "Feasible and Prudent." |
| publicly owned | Property that is owned and/or operated by a public entity. If a governmental body has a proprietary interest in the land (such as fee ownership, drainage easements or wetland easements), it can be considered publicly owned. Land subject to a public easement in perpetuity can also be considered to be publicly owned land for the purpose for which the easement exists. |
| right of way (ROW) | Land legally established for public use by pedestrians, vehicles, or utilities. |
| Section 6(f) of The Land Water Conservation Fund Act (LWCFA) | Section 6(f) directs the Department of the Interior (National Park Service) to assure that replacement lands of equal value, location, and usefulness are provided as conditions to approval of land conversions. Therefore, where a Section 6(f) land conversion is proposed for a highway project, replacement land will be necessary. |
| Section 106 | Under Section 106 of the National Historic Preservation Act of 1966, as amended, federal agencies must identify and evaluate cultural resources and consider how undertakings they fund, license, permit, or assist affect historic properties eligible for inclusion in the National Register of Historic Places. The federal agencies must afford the State Historic Preservation Officer and the Advisory Council on Historic Preservation the opportunity to comment on these undertakings. |

Glossary

| | |
|--|---|
| significance | Significance means that in comparing the availability and function of a Section 4(f) resource with the recreational, park, and refuge objectives of that community, the resource in question plays an important role in meeting those objectives. Barring a determination from the official with jurisdiction to the contrary, the Section 4(f) land will be presumed to be significant. All determinations (whether stated or presumed) are subject to review by FHWA for reasonableness. |
| substantially impaired | Substantial impairment occurs only when the protected activities, features, or attributes of the resource are largely diminished. |
| temporary occupancy | A temporary occupancy of land is so minimal that it does not constitute a use within the meaning of Section 4(f) when the duration is temporary, the scope of work is minor, there are no anticipated permanent adverse physical effects, and when the land will be fully restored. There must be documented agreement of the appropriate Federal, State, or local officials having jurisdiction over the resource regarding the above conditions. |
| use | Generally, "use" occurs with a DOT-approved project or program (1) when land from a Section 4(f) site is acquired for a transportation project, (2) when there is an occupancy of land that is adverse in terms of the statute's preservationist purposes, or (3) when the proximity impact of the transportation project on the Section 4(f) site, without acquisition of land, are so great that the purposes for which the Section 4(f) site exists are substantially impaired. |
| unique problems | Unique problems are present when there are unusual factors, or when the costs or community disruption reach extraordinary magnitude. |
| US Department of the Interior (DOI) | The nation's principal conservation agency, the DOI plays an important role in conserving the nation's natural and cultural heritage. It comprises many agencies, including the Bureau of Land Management, the National Park Service, the Fish and Wildlife Service, the Bureau of Reclamation, and the Bureau of Indian Affairs. Section 4(f) requires the state Department of Transportation to cooperate and consult with the DOI in developing transportation plans that affect Section 4(f) resources. |
| US Department of Transportation (DOT) | As the federal steward of the nation's transportation system, the DOT speaks for transportation in the federal government. It comprises agencies that provide transportation services to the American public, including the Federal Highway Administration, the Federal Transit Administration, the Federal Aviation Administration, and the U.S. Coast Guard. Section 4(f) of the USDOT Act of 1966 stipulates that agencies within the DOT cannot approve a project that uses of land from a significant publicly owned park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless there is no feasible and prudent alternative to the use of land. |

Acronyms and Abbreviations

| | |
|-------|---|
| APE | area of potential effect |
| BMPs | best management practices |
| BNSF | Burlington Northern Santa Fe |
| CFR | code of federal regulations |
| DAHP | Department of Archaeology and Historic Preservation |
| dB | decibel |
| dBA | A-weighted decibels |
| DOI | U.S. Department of the Interior |
| DOT | U.S. Department of Transportation |
| EA | environmental assessment |
| EIS | environmental impact statement |
| FHWA | Federal Highway Administration |
| FTA | Federal Transit Administration |
| HOV | high-occupancy vehicle |
| IAC | Interagency Committee for Outdoor Recreation |
| I-405 | Interstate 405 |
| I-90 | Interstate 90 |
| LWCF | Land and Water Conservation Fund |
| MOA | memorandum of understanding |
| NAC | noise abatement criteria |
| NB | northbound |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NPS | National Park Service |
| NRHP | National Register of Historic Places |

Acronyms and Abbreviations

| | |
|-------|---|
| ROD | record of decision |
| ROW | right of way |
| SB | southbound |
| SE | southeast |
| WSDOT | Washington State Department of Transportation |
| WSHR | Washington State Heritage Register |

Introduction

In 1998, the Washington State Department of Transportation (WSDOT) joined with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), Central Puget Sound Regional Transit Authority (Sound Transit), King County, and local governments in an effort to reduce traffic congestion and improve mobility in the Interstate 405 (I-405) corridor. In fall 2002, the combined efforts of these entities culminated in the *I-405 Corridor Program Final Environmental Impact Statement (EIS)* and *FHWA Record of Decision (ROD)*.

The ROD selected a project alternative that would widen I-405 by as many as two lanes in each direction throughout its 30-mile length. The ultimate configuration of the selected alternative includes buffers separating general-purpose lanes from parallel high-occupancy vehicle (HOV) lanes (potentially used by future high-capacity transit). The design also allows for expanded “managed lane” operations along I-405 that could include use of HOV lanes by other user groups, such as trucks.

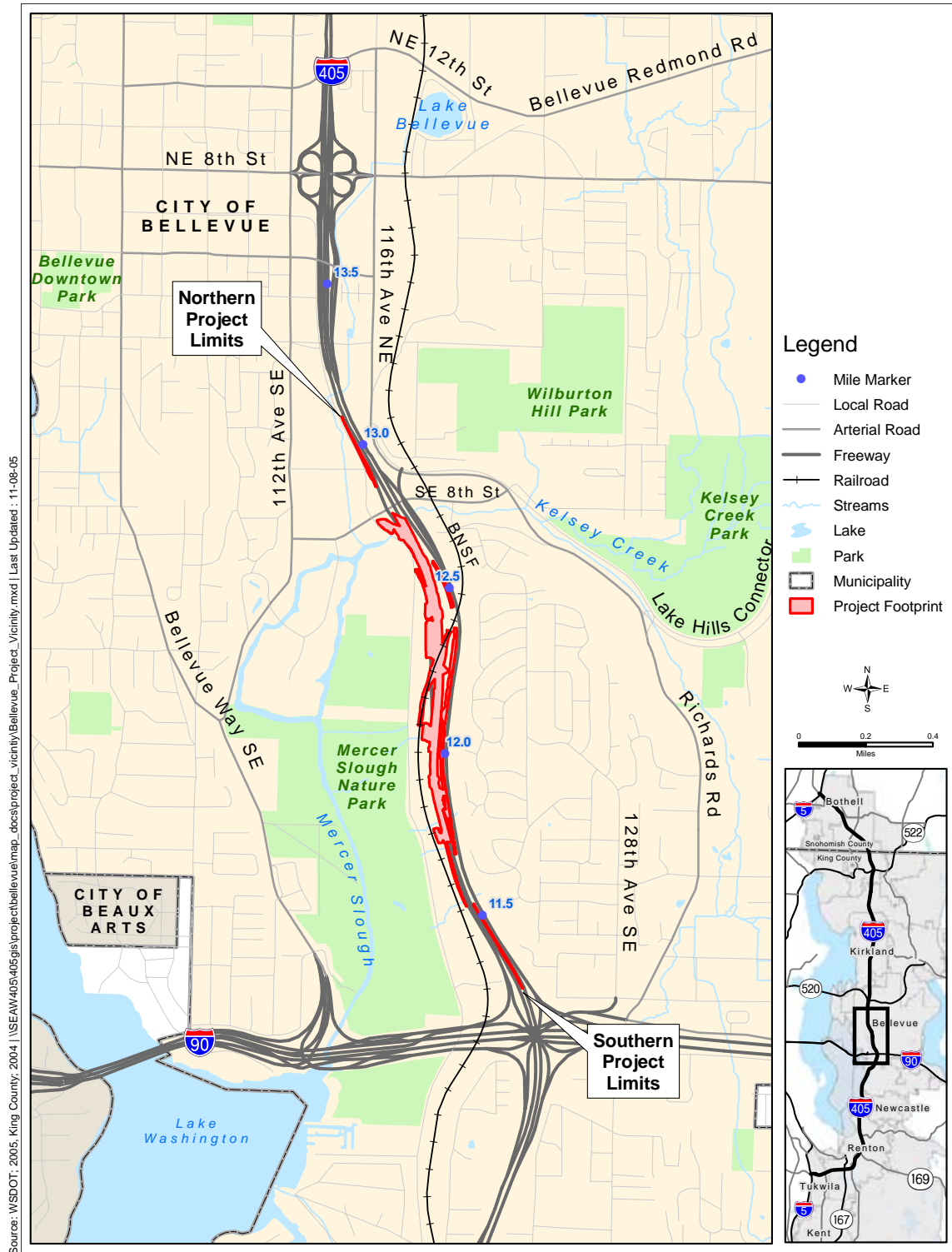
In 2003, the Washington State legislature approved a statewide transportation-funding plan called the “nickel package.” The nickel package provided funding for congestion relief projects in three critical traffic hotspots along the I-405 Corridor: Renton, Bellevue, and Kirkland. The Bellevue Nickel Improvement Project is one of several projects now moving forward as part of a phased implementation of the I-405 Corridor Program. Exhibit 1 shows the location of the Bellevue Nickel Improvement Project.

In 2003, the Washington State legislature approved a statewide transportation-funding plan called the “nickel package.” The nickel package provides funding for congestion relief projects in three critical traffic hotspots along the I-405 Corridor, including Bellevue.



Traffic moving along I-405

Exhibit 1. Project Vicinity Map



In keeping with the direction established in the Final EIS (FEIS) and ROD, we are preparing a National Environmental Policy Act (NEPA) Environmental Assessment (EA) that focuses on project-level effects of constructing and operating the Bellevue Nickel Improvement Project.

We will base the EA on the analysis in the *I-405 Corridor Program Final EIS*, and will describe any new or additional project changes, information, effects, or mitigation measures not identified and analyzed in the corridor-level FEIS. The project-level EA for the Bellevue Nickel Improvement Project will not reexamine the corridor-level alternatives, effects, and mitigation measures presented in the corridor-level FEIS, or the decisions described in the ROD.

The Environmental Assessment will describe new project changes, information, effects, or mitigation measures, but the assessment will not revisit the alternatives, impacts, and mitigation measures evaluated in the corridor-level EIS or the decisions documented in the *Record of Decision*.

What alternatives do we analyze in this discipline report?

This discipline report is one of 19 environmental elements WSDOT will study to analyze the effects of the Bellevue Nickel Improvement Project. All of the discipline reports will analyze one build alternative and one “no build” or “no action” alternative. This approach is consistent with FHWA’s guidelines for preparing a NEPA EA.

What is the No Build Alternative?

NEPA requires us to include and evaluate the No Build Alternative in this discipline report. We use this approach to establish an existing and future baseline for comparing the effects associated with the Build Alternative. We assume the No Build Alternative will maintain the status quo: only routine activities such as road maintenance, repair, and safety improvements would occur within the corridor between now and 2030. The No Build Alternative does not include improvements that would increase roadway capacity or reduce congestion on I-405. We describe these improvements further in the Bellevue Nickel Improvement Project Traffic and Transportation Discipline Report.

We assume the No Build Alternative will maintain the status quo: only routine activities such as road maintenance, repair, and safety improvements would occur within the corridor between now and 2030.

What are the principal features of the Build Alternative?

The Build Alternative will add one new general-purpose lane in each direction along a 2-mile section of I-405 between Interstate 90 (I-90) and SE 8th Street. The new pavement will

generally be constructed on the inside or “median” side of I-405. After restriping, the new lanes will be located on the outside of the existing roadway. The Build Alternative also includes new stormwater management facilities and a substantial upgrade of existing drainage structures and systems. Other project activities associated with the Build Alternative include developing off-site wetland mitigation as well as on-site stream mitigation areas to compensate for the loss of these resources within the study area. We expect project construction to begin in spring 2007 and the improved roadway to be open to traffic by fall 2009.

Improvements to Southbound I-405

We will add one lane in the southbound direction of I-405 from approximately SE 8th Street to I-90.

In the southbound (SB) direction, we plan to add one new travel lane from approximately Southeast (SE) 8th Street to I-90 (Exhibits 2, 3, and 4). In addition, the existing outside HOV lane at I-90 will be extended north so that it begins at the on-ramp from SE 8th Street. In order to add these lanes and maintain traffic flow during construction, we will shift approximately 3,000 feet of the SB roadway as much as 200 feet east into the existing median. The relocated SB roadway will connect to the existing SB travel lanes just north of the I-90 interchange, and south of the existing bridge over SE 8th Street.

We will build a new tunnel underneath the Burlington Northern Santa Fe (BNSF) railroad, just east of the existing Wilburton Tunnel, to accommodate the relocated and widened SB roadway. The existing tunnel does not have the capacity to accommodate additional lanes of SB traffic.

The existing SB travel lanes and the Wilburton Tunnel will remain open to traffic during construction of the new tunnel and the relocated/widened SB lanes. We will also build the new tunnel wide enough to accommodate additional lanes. The existing tunnel will remain after we complete the improvements.

Exhibit 2. Proposed Bellevue Nickel Project Improvements (Sheet 1 of 3)

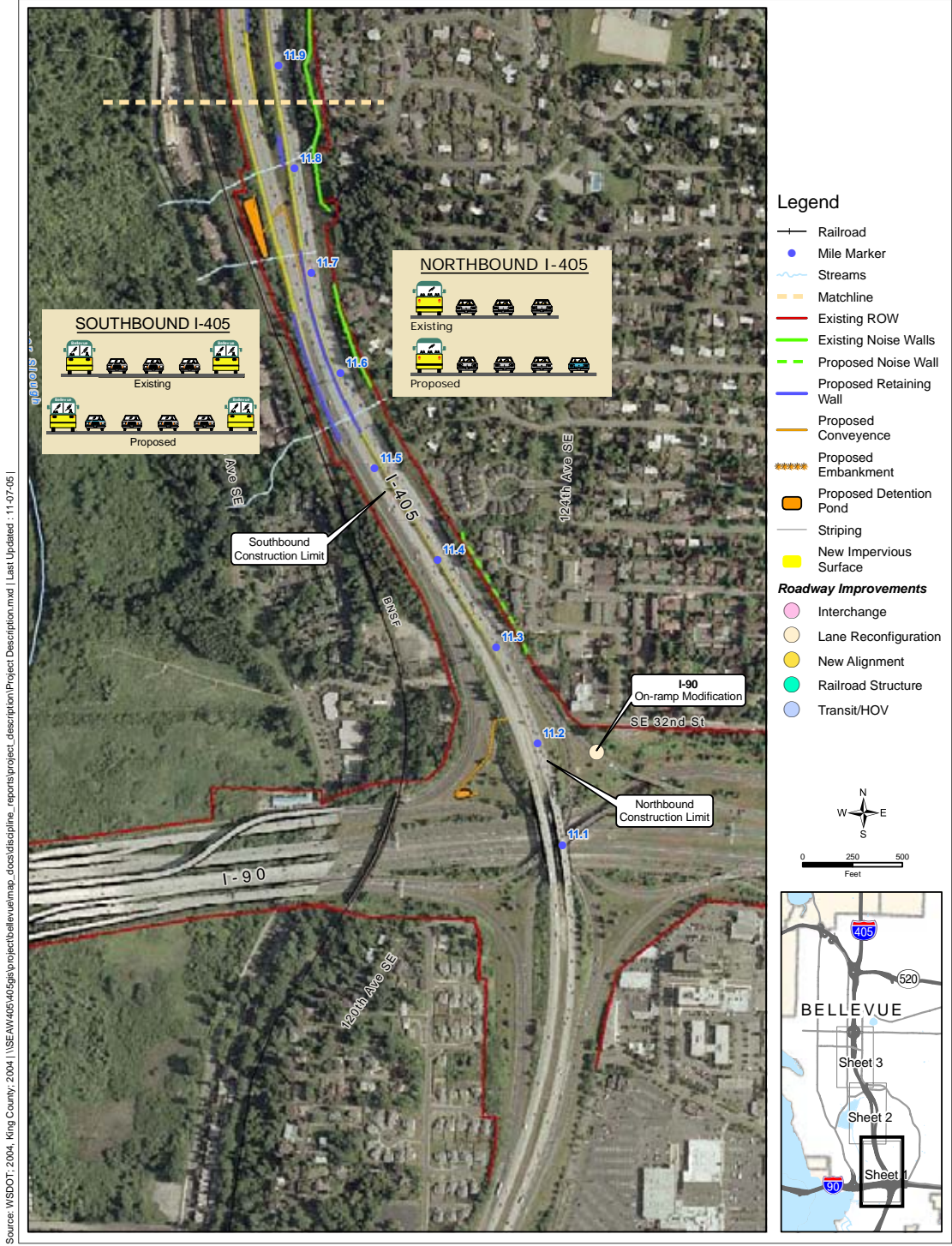


Exhibit 3. Proposed Bellevue Nickel Project Improvements (Sheet 2 of 3)

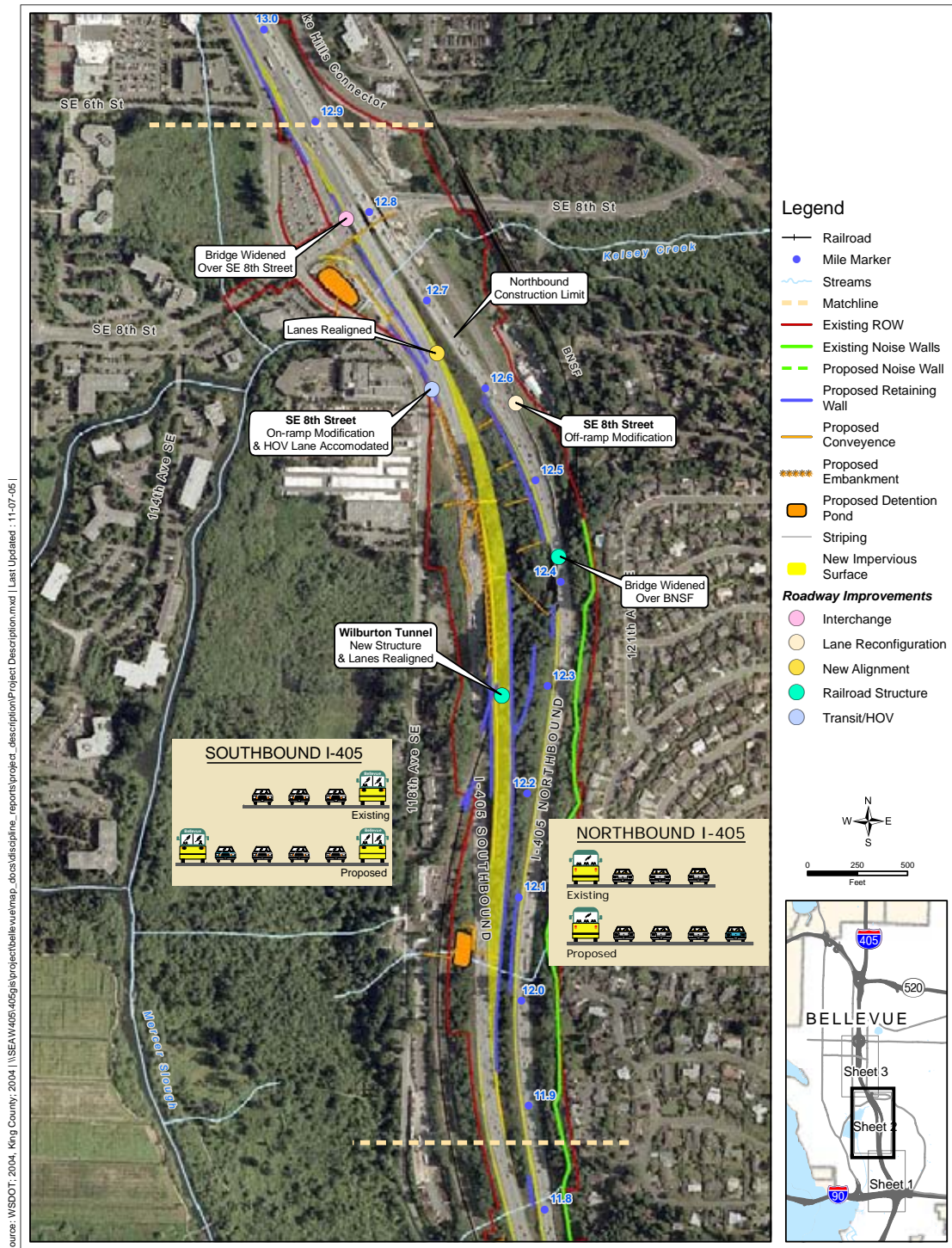
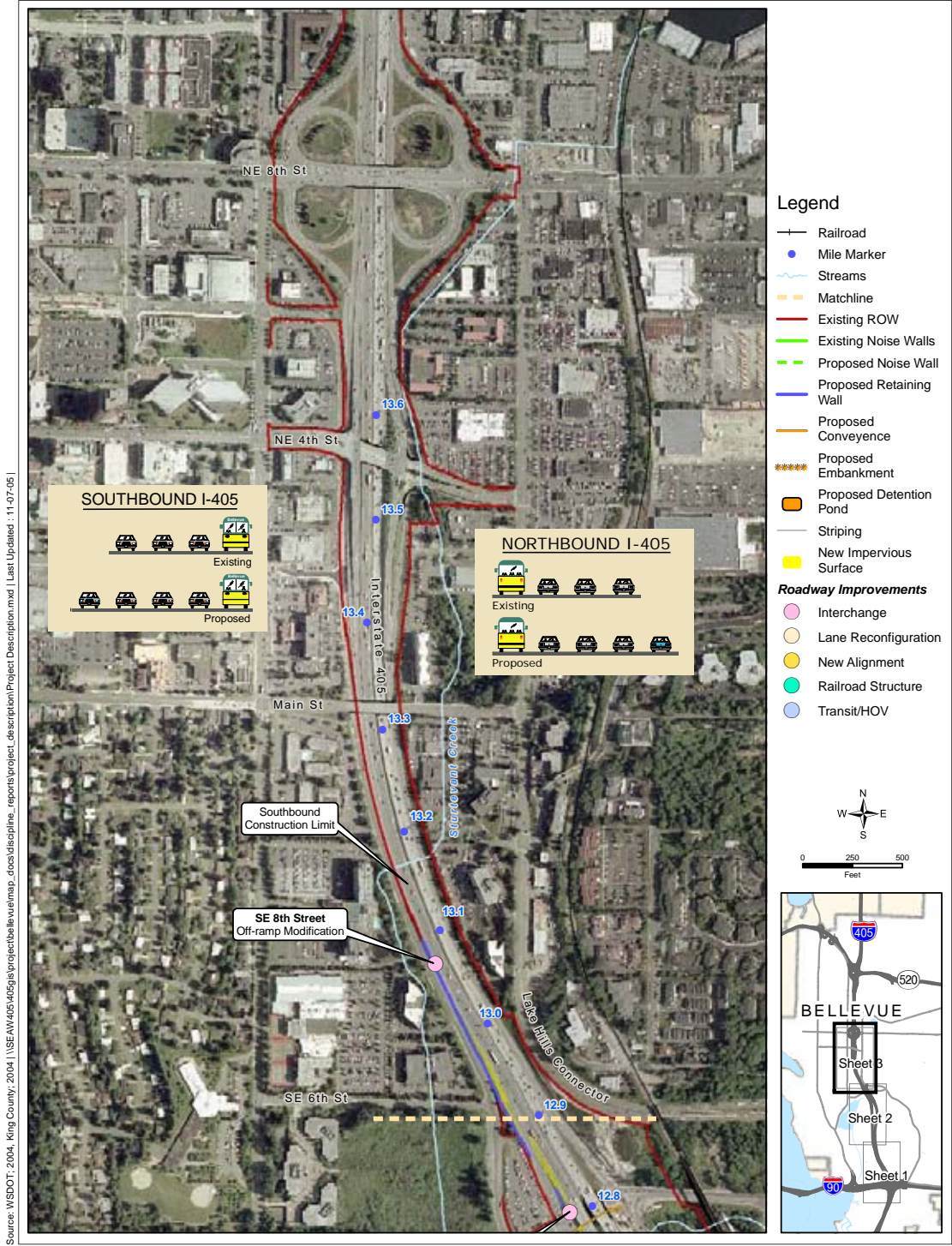


Exhibit 4. Proposed Bellevue Nickel Project Improvements (Sheet 3 of 3)



We will also include the following improvements in the Build Alternative:

- Modify the existing off-ramp at SE 8th Street to make room for an additional southbound lane on I-405. The off-ramp will then become a single-lane, optional off-ramp (i.e. the off-ramp will no longer be an “exit only” off-ramp).
- Build a retaining wall between the SB travel lanes and the off-ramp at SE 8th Street.
- Widen the existing bridge over SE 8th Street to the west to accommodate the new SB lane.
- Modify the existing on-ramp at SE 8th Street to tie into the relocated SB general-purpose travel lanes.
- Reconfigure the on-ramp at SE 8th Street to accommodate the extended outside HOV lane.
- Temporarily shift the existing BNSF railroad track from its current alignment to allow for continuous railroad operation during construction of the new tunnel.
- Construct retaining walls along the eastern edge of the relocated SB travel lanes.

Improvements to Northbound I-405

We will add one lane in the northbound direction of I-405 from approximately I-90 to SE 8th Street. All widening of the northbound mainline will occur on the inside (median side) of the existing roadway.

In the northbound (NB) direction, we plan to add one new travel lane from approximately I-90 to SE 8th Street (Exhibits 2, 3, and 4). We will add one new lane to the NB ramp from I-90. We will shift the NB lanes to allow all of the proposed widening to occur on the inside, or median side of the existing roadway.

Additional improvements include:

- Re-stripe the westbound/eastbound I-90 on-ramp to NB I-405 resulting in one lane becoming two lanes in the NB direction.
- Widen, shift, and re-stripe NB I-405 travel lanes north of I-90 to allow the westbound I-90 to NB I-405 on-ramp and the eastbound I-90 to NB I-405 on-ramp to enter I-405 without having to merge into a single lane.
- Construct several retaining walls needed for road widening in locations that allow for existing and future widening of I-405.

- Construct a noise barrier approximately 725 feet long and 16 feet high (see Exhibit 2).
- Widen the existing bridge over the BNSF railroad to the west to accommodate the new NB lane.
- Modify the NB off-ramp to SE 8th Street to make it a single-lane “exit-only” off-ramp.
- Transition the NB travel lanes back into the existing lane configuration before crossing over SE 8th Street.

Improvements to the Stormwater Management System

Managing stormwater for the I-405 Bellevue Nickel Improvement Project involves the collection and treatment of rainfall runoff from the new project pavement consistent with the guidelines in the WSDOT Highway Runoff Manual.

Currently, we treat less than 5 percent of the existing runoff from paved surfaces in the study area before discharging it. We will improve this condition by treating 17 percent more area than the new paved surface area we create. By treating a greater area, we improve flow control and remove pollutants from a portion of the existing roadway as well as from newly constructed areas.

Reconfiguration and new construction associated with the SB lanes will mean that we need to replace much of the existing drainage system. We will continue to use open roadside ditches along the shoulders of the roadway shoulders where possible. We will use standard WSDOT catch basins and manhole structures to move the roadway runoff to a system of stormwater drain pipes. These features will transport runoff to treatment and flow-control facilities within the existing ROW.

We will construct three new stormwater ponds (detention ponds combined with stormwater treatment wetlands) as part of the project and enlarge the existing pond at SE 8th Street. Two of the new ponds will be located south of the Wilburton Tunnel between the SB lanes and the BNSF railroad ROW. We will construct the third new pond in the northwest quadrant of the I-90/I-405 interchange. The project will discharge treated stormwater following existing flow patterns to Mercer Slough or to the wetlands that surround it.

Avoidance and Minimization Measures

WSDOT will use Best Management Practices (BMPs), WSDOT Standard Specifications, and design elements to avoid or minimize potential effects to the environment for the Bellevue

Best Management Practices (BMPs)

BMPs are generally accepted techniques that, when used alone or in combination, prevent or reduce adverse effects of a project. Examples include erosion control measures and construction management to minimize traffic disruption. Please see Appendix A for a complete list of BMPs.

WSDOT Standard Specifications

Guidelines and procedures established by WSDOT for roadway design and construction in a variety of design, engineering, and environmental manuals.

Improvement Project. Collectively, these measures to avoid or minimize potential effects to the environment are known as “avoidance measures.” We describe these measures in more detail in an Appendix A. If the Bellevue Nickel Improvement Project has additional effects not addressed in the avoidance measures, we will address these measures through mitigation.

Wetland and Stream Mitigation Sites

We will compensate for adverse effects to wetlands and their buffers by creating just over an acre of wetland within the boundaries of Kelsey Creek Park (Exhibit 5). The site is located north of the intersection of Richards Road and the Lake Hills Connector.

Our general concept will be to create an area that will transition from forested land beside the Lake Hills Connector to wetlands within Kelsey Creek Park. We will reshape the surface area to create favorable conditions for the necessary wetland aquatic characteristics, and we will replant and enhance habitat in the area by constructing habitats and replanting adjacent roadside areas with forest-type vegetation.

Similarly, we will compensate for unavoidable effects to “Median Stream,” the unnamed stream within the I-405 median. We have developed a conceptual stream mitigation plan that includes on-site habitat restoration and creation. The conceptual stream mitigation plan includes the following specific elements (See Exhibit 6):

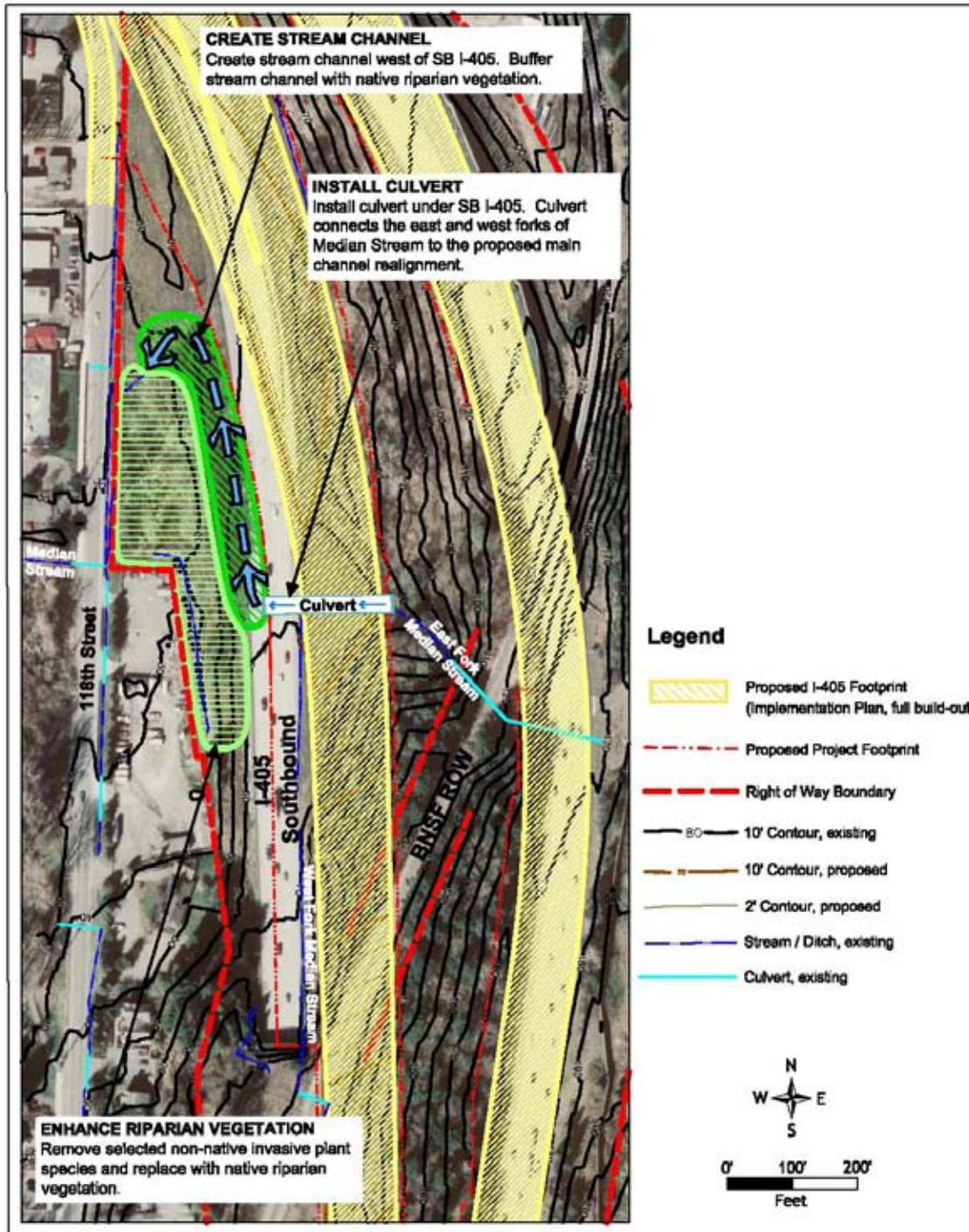
- Connect the new Median Stream culvert under I-90 to the existing channel and wetland located west of SB I-405.
- Create approximately 500 linear feet of stream channel along the western slope of SB I-405.
- Buffer the created stream channel with approximately 16,000 square feet of native streamside vegetation.
- Enhance approximately 300 linear feet of riparian habitat west of SB I-405 by removing selected non-native invasive plant species and replacing with native streamside vegetation.

We provide more detailed information about mitigation efforts planned in conjunction with the Bellevue Nickel Improvement in the Surface Water, Floodplains, and Water Quality, and Wetlands discipline reports.

Exhibit 5. Proposed Wetland Mitigation Area



Exhibit 6. Conceptual Stream Mitigation Plan



What is Section 4(f)?

Section 4(f) of the Department of Transportation Act (DOT) of 1966 (49 USC 303) prohibits the Federal Highway Administration (FHWA) from approving a transportation project that uses land from a significant public park, recreation area, wildlife or waterfowl refuge, or land of an historic site of national, state, or local significance, unless:

- There is no feasible and prudent alternative, and
- The project includes all possible planning to minimize harm to the property.

We must select a feasible and prudent alternative if it avoids using this land. The proponent must identify and incorporate measures that seek to avoid and if unavoidable, minimize harm to the resource.

A Section 4(f) evaluation must be prepared if the project uses any 4(f) resources. In a Section 4(f) evaluation, the proponent must:

- describe the affected properties;
- discuss the specific use(s) of the resources;
- identify and evaluate alternatives that avoid use of 4(f)-protected lands;
- include measures to minimize harm resulting from unavoidable effects to Section 4(f) resources;
- coordinate with officials who have jurisdiction over or who administer the lands that will be affected; and
- determine the applicability or non-applicability of Section 4(f) to a property.

What are Section 4(f) resources?

The Code of Federal Regulations – specifically 23 CFR 771.135 – defines Section 4(f) resources using three categories:

Public parks and recreation areas, if they meet the following criteria:

- They must be publicly owned.

Significant

When a Section 4(f) resource plays an important role in meeting the recreational, park, and refuge objectives of a community, the Section 4(f) land is considered significant.

Feasible and Prudent

A term that is integral to the Section 4(f) process, ***feasible and prudent*** refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term "***feasible***" refers to the constructability of a project — whether or not it can be built using current construction methods, technologies, and practices. The term "***prudent***" refers to how reasonable the alternative is — in essence, whether or not it makes sense.

An alternative may be rejected if it is considered not feasible and prudent for any of the following reasons:

- project purpose and need are not met
- excessive cost of construction
- severe operational or safety problems
- unacceptable impacts (social, economic or environmental)
- serious community disruption
- a combination of any of the above

Minimize Harm (Minimization)

Minimization involves developing measures during the planning phase of a project to reduce proposed effects to a resource. Minimization measures could include shifting an alignment, committing to off-season construction, replacing land or facilities, restoring or landscaping, or paying fair market value for affected lands.

- They must be open and available for use by all members of the public.
- Their major purpose is for public recreation activities.
- They must be considered significant by the federal, state, or local official having jurisdiction over the facility.

Historic sites, if they are identified as properties of local, state or national significance by the official with jurisdiction, include properties listed on or eligible for the National Register of Historic Places (NRHP). WSDOT, however, does not recognize historic sites of statewide or local significance or those listed on the Washington State Heritage Register (WSHR) as automatically falling under the protection of Section 4(f), unless such sites are also on or eligible for the National Register. The responsible WSDOT official may, at his or her discretion, apply Section 4(f) to such historic sites but this is not mandatory.

Wildlife or waterfowl refuges are publicly owned lands that have been set aside and designated for the protection of wildlife species and/or migratory birds.

What constitutes a “use” of Section 4(f) resources?

“Use” of Section 4(f) resources as defined by the Act¹, occurs under the following circumstances:

1. Land is permanently incorporated into a transportation facility.
2. The land is subject to temporary occupancy and/or temporary or permanent adverse changes, such as contour alterations or removal of mature trees and other vegetation, may occur during project construction. Temporary occupancy during construction will not always constitute a use of Section 4(f) land. Short-term, temporary occupancy or effect (e.g., for a construction easement) does not constitute a use under Section 4(f) as long as all of the following conditions are met:

Permanently Incorporated

This is the physical and permanent procurement of a protected resource for use by a transportation project. This is also known as an *actual* or *direct use*.

¹ 23 CFR 771.135(p) (1) and (2) is where DOT specifically describes 4(f) “use.”

- Occupancy is temporary (i.e., shorter than the construction period for the entire project) and there is no change in ownership.
- Changes are minimal.
- No permanent adverse physical effects result and there is no interference with the activities or purposes of the resource on either a temporary or permanent basis.
- The land being used will be restored to a condition which is at least as good as that prior to the project.
- Documented agreement(s) exist between relevant jurisdictions regarding temporary use of the resource.

3. There is a constructive use of land.

When would a constructive use occur?

A constructive use occurs when:

- Noise from the project substantially interferes with the use and enjoyment of the resource, such as enjoyment of a historic site where a quiet setting is a generally recognized feature or attribute of the site's significance, or enjoyment of any park where serenity and quiet are significant attributes. The increase in the decibel (dB) level must not only be detectable to the human ear and exceed the FHWA noise abatement criterion as contained in Table 1 of 23 CFR Part 772, but it must also be severe enough to truly impair enjoyment of the Section 4(f) resource; or
- The proximity of the proposed project substantially impairs aesthetic features or attributes that contribute to the value of the resource. An example might be the location of a roadway that obstructs or eliminates a view or substantially detracts from the setting of a park or historic site that derives its value in substantial part due to its setting; or
- The project restricts access and would result in a substantial decrease in the use of the resource; or
- Vibration from the project substantially impairs the use of the resource.

Temporary Occupancy

A temporary occupancy of land is a "use" as determined by the length of occupancy, scope of work, anticipated permanent adverse physical effect on the land, and whether the resource can be restored to its original condition prior to occupancy. There must be documented consensus among the appropriate federal, state, or local officials with jurisdiction over the resource regarding the above conditions.

Constructive Use

A type of indirect use in which a transportation project's proximity effects (as opposed to direct effects) are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Examples include excessive increases in noise level, diminished aesthetic features, ecological intrusions, and other indirect effects to the resource's environment or utility.

Decibels (dB)

Sound intensity is measured in units called decibels (dB). The dB scale is logarithmic and climbs steeply: an increase of about three decibels is a doubling of sound volume. In the wilderness, a typical sound level would be 35 dB. Speech runs 65 to 70 dB; heavy traffic generates 90 dB. By 140 dB, sound becomes painful to the human ear but ill effects, including hearing loss, set in at much lower levels.

In all instances, a “substantial impairment” of the resource is necessary for a constructive use to occur.

How do we decide if the project will affect 4(f) resources?

What is the IAC?

The Office of the Interagency Committee is a state agency that serves two boards, the Interagency Committee for Outdoor Recreation (IAC) and the Salmon Recovery Funding Board. The agency is charged with implementing policies and programs established by the boards, the legislature, and the Governor. The IAC administers state and federal grant programs for recreation and habitat conservation.

Why do we use 50 years?

The federal government uses specific criteria for determining the significance of a cultural resource. The criteria stipulate that the resource must be a building, site, structure, object or district at least 50 years of age to be eligible for the National Register (36 CFR 60).

The I-405 Corridor Program Final Preliminary 4(f) Evaluation (Booth 2002) identifies potentially affected public parks, recreation areas, wildlife and waterfowl refuges, and historic resources (collectively referred to as 4(f) resources). For the Bellevue Nickel Improvement Project, we confined the assessment to 4(f) lands located within 0.25 mile of the proposed improvements. We conducted additional research beyond the Preliminary Evaluation, including site investigations and coordination with the City of Bellevue and the Interagency Committee for Outdoor Recreation (IAC).

The team evaluating cultural resources surveyed all historic resources in the study area that predate 1955. WSDOT selected the year 1955 to cover all cultural resources that would be 50 or more years old prior to the time we conducted the cultural resources investigation. Please refer to the Historic, Cultural, and Archeological Resources Discipline Report for more detailed information on cultural resources.

After identifying the Section 4(f) properties within the study area, we evaluated those properties subject to a use as defined by the DOT Act of 1966. We prepared the Section 4(f) Evaluation based on guidance contained within the FHWA Section 4(f) Policy Paper issued March 1, 2005; Title 2 of the Code of Federal Regulations, Section 771.135 (Section 4(f)); and the WSDOT Environmental Procedures Manual published in September 2004. These documents explain how Section 4(f) applies generally and to specific situations. They are based on court decisions, experience, and on policies developed by the FHWA and the U.S. Department of Transportation over the years. The Policy Paper serves as a guide for how Section 4(f) applies to common project situations often encountered by state departments of transportation. The manual clarifies the coordination and documentation procedures.

What resources might be affected?

There are four publicly owned parks, two architecturally historic resources, and no waterfowl or wildlife refuges near the proposed Bellevue Nickel Improvement Project ROW. Exhibit 7 compares each of the resources with Section 4(f) criteria and identifies those

resources that will be protected Section 4(f) properties. Each of these properties and the study area are shown in Exhibit 8.

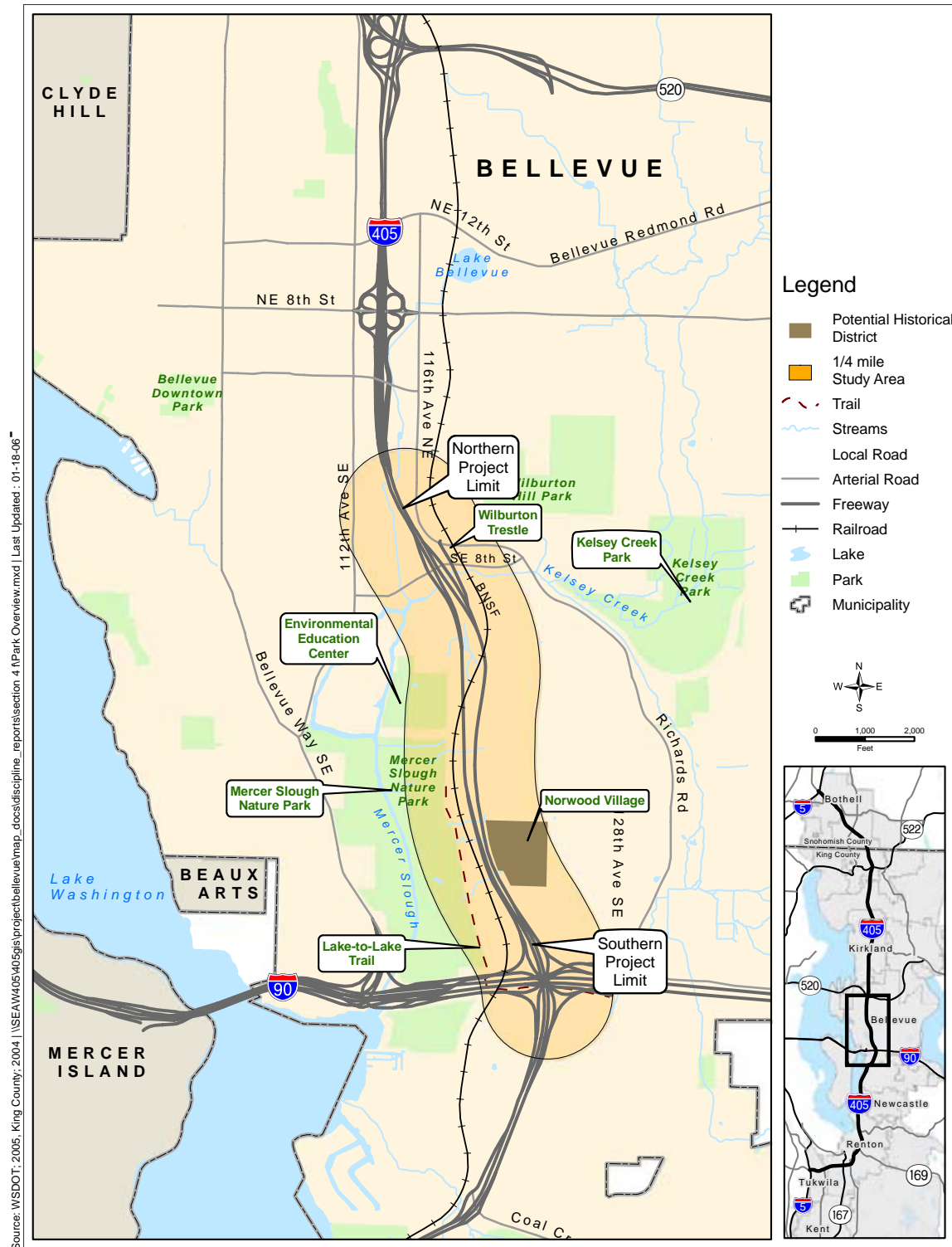
Exhibit 7. Resources in the Study Area and Section 4(f) Criteria

| Property | Publicly Owned | Open to the Public | Major Purpose is Recreation | Significant as a Park | Section 4(f) Protected Property |
|---------------------------------------|----------------|--------------------|-----------------------------|-----------------------|---------------------------------|
| Park and Recreation Facilities | | | | | |
| Mercer Slough Nature Park | Yes | Yes | Yes | Yes | Yes |
| Environmental Education Center | Yes | Yes | Yes | Yes | Yes |
| Lake-to-Lake Trail and Greenway | Yes | Yes | Yes | Yes | Yes |
| Kelsey Creek Park | Yes | Yes | Yes | Yes | Yes |
| Historic Resources | | | | | |
| Norwood Village | | | | | Yes ^a |
| Wilburton Trestle | | | | | Yes ^b |

^a Norwood Village has not been officially determined to be eligible for the National Register of Historic Places but because the cultural resource survey concluded that it had the potential to be NRHP- eligible, it is appropriate to treat it as a historic resource for the purposes of determining the potential effects of the project on this possible 4(f) resource.

^b Wilburton Trestle has been determined eligible for listing in the NRHP.

Exhibit 8. Section 4(f) Resources in the Study Area



What are the Section 4(f) resources that may be subject to use by any alternative WSDOT is considering?

This section describes the Section 4(f)-protected properties along the Bellevue Nickel Improvement Project, beginning at the southern project limit and continuing north (see Exhibit 8).

Mercer Slough Nature Park

The 320-acre City of Bellevue Mercer Slough Nature Park (Exhibit 9) provides a variety of recreational experiences. Mercer Slough is Lake Washington's largest wetland. It contains hundreds of plant species; wetlands, slough, and streams; and provides diverse habitat for over 170 species of wildlife. Visitors travel through this unique urban wetland on elevated boardwalks, soft surface trails, and asphalt paths.

Specific park elements include:

The Periphery Trail, an asphalt path circling the perimeter of the park, is used for jogging, bicycling, and rollerblading. A component of both the Lake Washington Bike Loop and Mountains to Sound Greenway, the trail provides connections to Newcastle Beach Park, Seattle, Factoria, Renton, and beyond.

The Winters House Visitors Center, located on the west side of the park, provides exhibits, information, rental facilities, restrooms, trailhead parking, and is home to the Eastside Heritage Center.

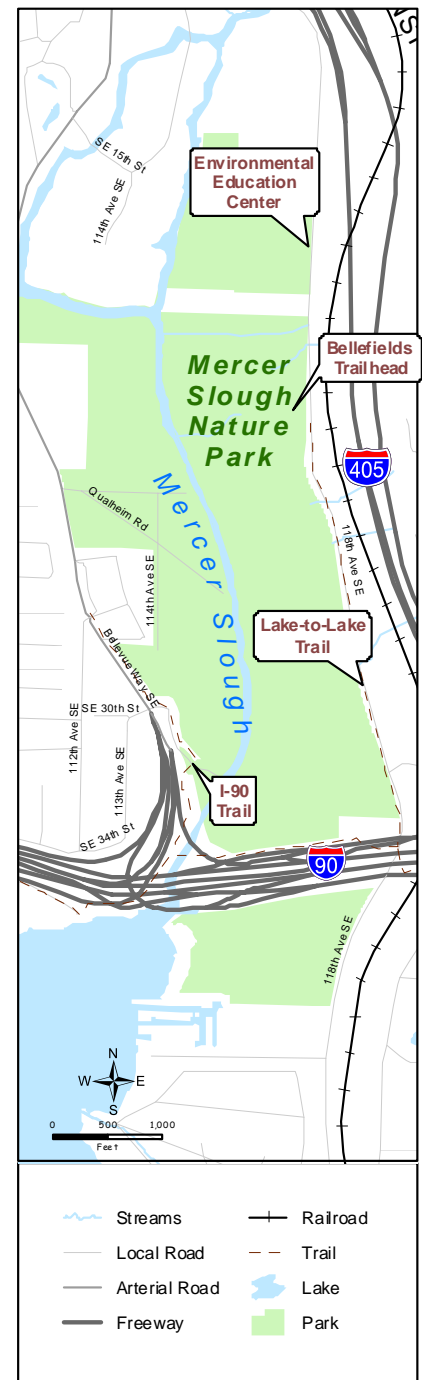
The Heritage Trail, located behind the Winters House, meanders past remnants of old greenhouses, through an abandoned rhododendron nursery, and parallels the historic blueberry fields to the boardwalk connecting to the Bellefields Trail.

The Mercer Slough Blueberry Farm provides restrooms, trailhead parking, and seasonal produce sales.

The Bellefields Trailhead, located on the east side of the park, loops through upland forest, scrub-shrub wetland, and open meadow habitats to the edge of the slough channel. Interpretive signs provide information on the history and benefits of the wetland.

The Canoe Trail is located on the Mercer Slough.

Exhibit 9. Mercer Slough Nature Park, Trails, and Environmental Education Center





Environmental Education Center



Lake-to-Lake Trail

Environmental Education Center

The Environmental Education Center is located immediately north of Mercer Slough Nature Park. The Center currently resides in the Sullivan House, an approximately 70-year-old home that was moved to this site from the Bellevue Downtown Park site. The Center engages children and adults in education programs focusing on environmental stewardship, wetland ecology, and nature awareness. The Environmental Education Center program is a partnership between the Pacific Science Center and the Bellevue Parks and Community Services Department. Funding and construction documents are in place to construct a new center on the site.

Lake-to-Lake Trail and Greenway

The Lake-to-Lake Trail and Greenway extends from Lake Washington to Lake Sammamish. The trail is a work in progress. Major pieces of the trail are in place and final links are being acquired to provide a walking path from Bellevue's Lake Washington beach parks, through the wetlands of Mercer Slough Nature Park, the Botanical Gardens at Wilburton Hill Park, Kelsey Creek Park, the lakes and wildlife in the Lake Hills Greenbelt and finally on to Lake Sammamish. The Lake-to-Lake Trail and Greenway provides a crucial link in the trail system developing throughout the Puget Sound region and also serves as a wildlife migration corridor.

Kelsey Creek Park

Kelsey Creek Park encompasses 150 acres of forest and wetland habitat in central Bellevue. The park features more than two miles of hiking and jogging trails. Several natural trails traverse the park's forested areas. The park includes Kelsey Creek Farm, which is home to a variety of different farm animals, including horses, pigs, goats, and sheep. One of Bellevue's oldest structures is located at Kelsey Creek Park. The Frazier cabin was built in 1888, when only about 300 people inhabited what is now Bellevue. The log cabin is one of the city's few remaining pioneer structures and was moved to Kelsey Creek Park in 1974. Other features include a children's playground, covered picnic shelter, and numerous picnic tables scattered throughout the park.

Norwood Village

WSDOT identified a potential historic district along the east side of the Bellevue Nickel Improvement Project (See Exhibit 8). University of Washington faculty and local architecture firms Bassetti and Morse, and Chairelli and Kirk developed Norwood Village in 1951. This is not currently a designated historic resource and has not been requested for such designation by the property owners. Eight houses within this neighborhood are within the Bellevue Nickel Improvement Project cultural resources APE.

Norwood Village is an example of post-World War II housing that is eligible for listing in the NRHP because it possesses distinctive design characteristics and is associated with important local architects. Its period of significance spans from 1950 to 1955, the design and construction period for the neighborhood. Please refer to the Historic, Cultural, and Archeological Resources Discipline Report for additional information.



Typical Architecture: Norwood Village

Wilburton Trestle

The Wilburton Trestle is listed on the WSHR and has been determined eligible for listing on the NRHP. The trestle is significant for its contribution to history, architecture, and the culture of Washington State. It carries a single railroad track across the Mercer Slough/Kelsey Creek drainage, just east of the SE 8th Street interchange. This 30-meter-high timber trestle is similar to the original structure built in 1904 by the Northern Pacific Railroad as part of the segment that transported coal from mines near Renton to the Bellevue area. Constructed with untreated timber, the trestle framing was completely replaced several times until the 1940s, when the entire structure was reconstructed with creosoted timber and timber treated with Wolman salts. It is a prominent structure that can be seen from many locations in the Wilburton/Mercer Slough area of Bellevue.



Aerial view of the Wilburton Trestle

Potential Effects

How will the project use 4(f) resources?

Mercer Slough Nature Park

Direct Effects

WSDOT will not acquire any Section 4(f) lands, either permanently or temporarily, from this park.

Proximity Effects

WSDOT noise specialists modeled noise levels of existing conditions in the study area between 53 and 70 dBA. These levels range from typical suburban outdoor sound levels, between 50 and 60 dBA, to very noisy levels (above 70 dBA), that are typical of locations within 100 feet of a busy freeway. WSDOT modeled noise levels at three locations (Receptors 34, 35, and 40) in the Mercer Slough Nature Park vicinity (see Exhibit 10). The modeled noise level at Receptor 40, located at the Environmental Education Center, currently exceeds the FHWA criteria of 67 dBA for existing conditions (Parsons Brinckerhoff Quade & Douglas, 2005). Exhibit 11 lists modeled noise levels at receptors 34, 35, and 40.

WSDOT then modeled traffic noise from I-405 and 118th Avenue SE separately for Receptor 40. The I-405 Build Alternative will generate 56 dBA of traffic noise from I-405 at this receptor. Because WSDOT predicts that traffic noise experienced at the Environmental Education Center will be

Exhibit 10. Noise Receptors



caused by local traffic on 118th Avenue SE and not from traffic associated with the I-405 Bellevue Nickel Improvement Project, the noise effect will not be caused by the I-405 Bellevue Nickel Improvement Project and cannot be mitigated by reducing traffic noise from I-405. There will be no constructive use resulting from traffic noise from the I-405 Bellevue Nickel Improvement Project.

Exhibit 11. Modeled Noise Levels at Receptors 34, 35, and 40

Noise Abatement Criteria (NAC)

Noise regulations and guidelines are the basis for evaluating potential noise effects. For state and federally funded highway projects, traffic noise effects occur when predicted noise levels approach or exceed the noise abatement criteria (NAC) established by the FHWA.

| Noise Receptor Number | Modeled Existing Noise Level (dBA) ^a | Future Modeled Noise Levels (dBA) without additional abatement | |
|-----------------------|---|--|------------|
| | | 2030 No Build | 2030 Build |
| 34 | 63 | 63 | 64 |
| 35 | 59 | 59 | 60 |
| 40 | 67 | 67 | 69 |

Values in **BOLD** approach or exceed the Noise Abatement Criteria (NAC).
^a Modeling of noise levels occurred during Spring 2005. (Parsons Brinckerhoff Quade & Douglas, 2005)

The Air Quality and Visual Quality discipline reports indicate that there will be no constructive use.

Construction Effects

I-405 construction will not affect Mercer Slough Nature Park. The projected noise levels and vibration during project operations will not substantially interfere with the use and enjoyment of this park. The proximity of the proposed project will not substantially impair aesthetic features or attributes protected by Section 4(f). The Build Alternative will not restrict access to the park.

Environmental Education Center

Direct Effects

WSDOT will not acquire any Section 4(f) lands, either permanently or temporarily, from this park.

Proximity Effects

We do not expect any proximity effects. Analyses in the Noise and Vibration, Air Quality, and Visual Quality discipline reports indicate that there will be no constructive use.

Construction Effects

I-405 construction will not affect the Environmental Education Center: The projected noise levels and vibration during project operations will not substantially interfere with the use and enjoyment of this facility. The proximity of the proposed project will not substantially impair aesthetic features or attributes protected by Section 4(f). The Build Alternative will not restrict access to the Center.

Lake-to-Lake Trail and Greenway

Direct Effects

All work on I-405 in the vicinity of the trail will be confined to the current right of way of the freeway. WSDOT will not acquire any Section 4(f) lands, either permanently or temporarily, from this linear park.

Proximity Effects

WSDOT does not expect any proximity effects to this linear park. Analyses in the Noise and Vibration, Air Quality, and Visual Quality discipline reports indicate that there will be no constructive use.

Construction Effects

There will be no construction effects along the Lake-to-Lake Trail and Greenway. The projected noise levels and vibration during operations attributable to the project will not substantially interfere with the use and enjoyment of this trail system. The proximity of the proposed project will not substantially impair aesthetic features or attributes protected by Section 4(f). The Build Alternative will not restrict access to the trail.

Kelsey Creek Park

WSDOT proposes to create a 1.94-acre wetland to compensate for the loss of approximately 1.0 acre of wetland. The proposed wetland mitigation site is located within an undeveloped portion of Kelsey Creek Park, immediately north of the intersection between Richards Road and Lake Hills Connector (see Exhibit 5). Non-native pasture grasses and shrubs dominate the roughly 3.6-acre site, located in a remote portion of the park and therefore removed from day-to-day park use.

The U.S. Department of Transportation FHWA Section 4(f) Policy Paper specifically addresses the expenditure of federal-aid highway funds for mitigation or non-transportation activities on a 4(f) resource: “Section 4(f) only applies where land is permanently incorporated into a transportation facility and when the primary purpose of the activity on the 4(f) resource is for transportation. If activities are proposed within a 4(f) resource solely for the protection, preservation, or enhancement of the resource and the official with jurisdiction has been consulted and concurs with this finding (in writing), then the provisions of Section 4(f) do not apply.”

WSDOT consulted with the City of Bellevue Parks and Community Services and the Transportation Division. A letter (Appendix B) dated December 5, 2005 is on file indicating that the proposed wetland mitigation is consistent with the function of the existing park and is considered an enhancement of the 4(f) resource. Kelsey Creek Park will not be permanently incorporated into the transportation facility itself, although it is part of the project mitigation. Because Section 4(f) protection will not apply, we have not completed an evaluation on direct, proximity and construction effects.

Norwood Village

Norwood Village is considered by the WSDOT to be eligible for the National Register of Historic Places. Following Section 106 of the NHPA, WSDOT examined whether the project will have an effect on this resource. WSDOT concluded that the project will not have an adverse effect on this potential historic district.

Direct Effects

WSDOT will not acquire any Section 4(f) lands, either permanently or temporarily, from this potential historic district.

Proximity Effects

Mature vegetation effectively screens the neighborhood from the roadway and will continue to do so. The Bellevue Nickel Improvement Project will not compromise the current visual quality.

The noise study team collected data at ten separate locations within and immediately adjacent to Norwood Village and found them all to be within the traffic noise abatement criteria of 67 dBA (see the Noise and Vibration Discipline Report for this

project). The current and anticipated noise levels are within the acceptable range for noise.

Noise levels are below the NAC. Analyses in the Air Quality and Visual Quality discipline reports indicate that there will be no constructive use.

Construction Effects

There will be no construction effects at the Norwood Village Historic District. The district's residents will be able to use and enjoy their neighborhood without substantial interference from projected noise levels and vibration during project operations. The proximity of the proposed project will neither substantially impair aesthetic features or attributes protected by Section 4(f), nor will the Build Alternative restrict access to the district.

Wilburton Trestle

The Wilburton Trestle is eligible for listing in the National Register of Historic Places. Following Section 106 of the NHPA, WSDOT examined whether the project will have an effect on this resource. WSDOT concluded that the project will not have an adverse effect on this resource.

Direct Effects

All work on I-405 in the vicinity of the trestle will be confined to the current ROW of the freeway. WSDOT will not acquire any Section 4(f) lands, either permanently or temporarily, from this railroad trestle.

Proximity Effects

WSDOT does not expect any proximity effects to the Wilburton Trestle. Analyses in the Noise and Vibration, Air Quality, and Visual Quality discipline reports indicate that there will be no constructive use.

Construction Effects

There will be no construction effects on the Wilburton Trestle. The proximity of the proposed project will neither substantially impair aesthetic features or attributes protected by Section 4(f) or cause noise and vibration that would result in construction effects. The Build Alternative will not restrict access to the trestle.

Are there feasible and prudent alternatives that would avoid use of the Section 4(f) properties?

WSDOT considered and incorporated avoidance alternatives into the Build Alternative. As a result, the expansion of I-405 between I-90 and SE 8th Street will not:

- Require acquisition of any Section 4(f) resource lands
- Impose any adverse temporary occupancy on resource lands
- Create constructive use effects at any of the identified Section 4(f) resources.

Although WSDOT identified the No-Build Alternative as a Section 4(f) avoidance option, it was not selected as an alternative to move forward because it did not meet the project purpose and need. While WSDOT does not consider this alternative to be feasible and prudent with respect to Section 4(f), we must still retain it in the EA process as a requirement of NEPA.

What measures did we include in the project to minimize harm to the Section 4(f) resources?

WSDOT did not have to identify any minimization measures for the Build Alternative because the project avoids all Section 4(f) resources.

What measures have we proposed to mitigate for unavoidable use of Section 4(f) resources?

Because WSDOT incorporated measures to avoid use of Section 4(f) resources into the planning process, the Bellevue Nickel Improvement Project will not:

- Require acquisition of any Section 4(f) resource lands.
- Impose any adverse temporary occupancy on resource lands.
- Create constructive use effects at any of the identified Section 4(f) resources.

Mitigation is not required.

Studies and Coordination

With which agencies/persons did we coordinate concerning avoidance alternatives, effects, measures to minimize harm, joint development (if applicable), and so forth?

The following summarizes coordination efforts between WSDOT and local and federal agencies and jurisdictions related to this Section 4(f) Evaluation:

- March 11, 2005 – Coordination with Darrell Jennings (IAC), concerning Land and Water Conservation Fund (LWCF) grants and recreation properties in the study area.
- March 28, 2005 – Coordination with Lorrie Peterson, Bellevue Parks & Community Services Department, concerning Bellevue Parks and the Environmental Education Center along the I-405 corridor.
- March 28, 2005 – Coordination with Glen Kost, Pacific Science Center, concerning the Environmental Education Center.
- August 28, 2005 – Coordination with Kit Paulsen, City of Bellevue, Dean DeWald, City of Bellevue Parks and Recreations, and Jeff Bradley, Department of Parks and Natural Resources, concerning wetland and stream mitigation options at Kelsey Creek Park.



Public park development has altered some streams in the study area.

Summary

What conclusions have we reached?

The Bellevue Nickel Improvement Project is one of three congestion relief projects along I-405. The Build Alternative will add one new general-purpose lane in each direction along a 2-mile section of I-405 between I-90 and SE 8th Street. The new lanes generally will be constructed on the inside or “median” side of the existing roadway. The Build Alternative includes new stormwater management facilities and a substantial upgrade of existing drainage structures and systems. Other improvements include wetland and stream mitigation areas to compensate for the loss of these resources within the study area.

There are four publicly owned parks, two architecturally historic properties, and no waterfowl or wildlife refuges located within 0.25 mile of the proposed Bellevue Nickel Improvement Project. These Section 4(f) resources include:

- Mercer Slough Nature Park
- Environmental Education Center
- Lake-to-Lake Trail and Greenway
- Kelsey Creek Park
- Norwood Village Historic District
- Wilburton Trestle

WSDOT considered and incorporated avoidance alternatives into the Build Alternative. As a result, the expansion of I-405



Kiosk greeting visitors to Kelsey Creek Park

between I-90 and SE 8th Street will not require acquisition of any Section 4(f) resource lands, will not impose any adverse temporary occupancy on resource lands, and will not create any constructive use effects at any of the identified Section 4(f) resources.

WSDOT and the FHWA determined that the No Build Alternative was not feasible and prudent because it did not meet the project purpose and need—that is, it will not improve traffic capacity and relieve congestion along the I-405 corridor.

References

- Booth, M. 2002. I 405 Corridor Program Final Preliminary 4(f) Evaluation. Prepared for the Washington State Department of Transportation.
- City of Bellevue. 2005. Parks and Community Services. Available at:
<http://www.cityofbellevue.org/parks>. Accessed: March 2005.
- . 2000. Driving Direction Guide to Bellevue Parks and Community Centers.
- . 2003. Parks and Open Space System Plan.
- . Nature Trail Guide.
- Federal Highway Administration. 1989. Section 4(f) Policy Paper. Available at:
<http://www.fhwa.dot.gov/environment/4fpol2.htm>. Accessed: April 2005.
- . 2005. “Section 4(f) Policy Paper,” March 1. “Non-Transportation Use of 4(f) Resources.”
- The Office of the Interagency Committee. 2005. Outdoor Recreation. Available at:
<http://www.iac.wa.gov>. Accessed: March 2005.
- . 2005. Land and Water Conservation Fund. Available at:
<http://www.nps.gov/ncrc/programs/lwcf/protect.html>. Accessed: March 2005.
- National Park Service. 2005. Land and Water Conservation Fund Maps by County. Available at:
<http://www.nps.gov/lwcf>. Accessed: March 2005.
- U.S. Department of Transportation, Federal Highway Administration. 2005. FHWA Section 4(f) Policy Paper.
- Washington State Department of Transportation. 2004. Environmental Procedures Manual. Available at: <http://www.wsdot.wa.gov/fasc/EngineeringPublications>. Accessed March 2005.
- . 2002. I-405 Corridor Program NEPA/SEPA Final Environmental Impact Statement.
- United States Code. Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303).

Appendix A

Avoidance and Minimization Measures

Avoidance and Minimization Measures

The following sections describe the established design and construction practices that WSDOT will include to avoid or minimize effects to the various environmental resources during both the construction and operation phases of the project.

Project Measures to Avoid or Minimize Effects During Construction

Design elements, such as modifications to boundaries of areas that can be affected, have been incorporated into the project specifications, construction plans, and procedures, to help avoid or minimize most potential construction impacts. When appropriate, monitoring will be conducted to ensure that these design and construction measures are effective.

Measures for Geology, Soils, and Groundwater

- WSDOT will prepare and implement a Temporary Erosion and Sedimentation Control (TESC) plan consisting of operational and structural measures to control the transport of sediment. Operational measures include removing mud and dirt from trucks before they leave the site, covering fill stockpiles or disturbed areas, and avoiding unnecessary vegetation clearing. Structural measures are temporary features used to reduce the transport of sediment, such as silt fences and sediment traps.
- WSDOT will reduce degradation of moisture-sensitive soils by limiting major earthwork to the drier, late spring through early fall construction season; by maintaining proper surface drainage to avoid ponding of surface water or groundwater; by minimizing ground disturbance through limiting the use of heavy equipment, limiting turns, and/or not tracking directly on the subgrade; and by covering the final subgrade elevation with a working mat of crushed rock and/or geotextile for protection. Mixing a soil admix such as cement into the subgrade may also add strength and stabilize the ground.
- WSDOT will determine acceptable limits for off-site construction-related ground vibration before construction begins and demonstrate that off-site ground vibrations are within the limits set for the project through the use of vibration-monitoring equipment.
- WSDOT will identify areas subject to shaking from a large earthquake and will mitigate risks using ground modifications or other procedures identified in the WSDOT Geotechnical Design Manual.
- WSDOT will implement construction procedures identified in the geotechnical investigation to maintain or enhance slope stability in areas potentially underlain by landslide-prone soils.
- WSDOT will protect the Kelsey Creek aquifer from contamination by construction-related spills by development and implementation of BMPs and a Spill Prevention Control and

Countermeasures plan (SPCCP). The SPCC will specifically address fuel spills from vehicles and from spills of other chemicals commonly transported over I-405. Spill response equipment will be located at regular and specified intervals within the project area for minimizing countermeasure response times.

- WSDOT will ensure only clean fill is imported and placed for the project and will require documentation for fill brought onto the site from the supplier certifying that the fill does not exceed Washington State soil cleanup standards. If documentation is not available, testing of imported fill soils will be required prior to placement. Suspect soils encountered during project construction will be tested and, where necessary, removed from the site and disposed of in accordance with Washington State regulations.
- WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses. Washout from concrete trucks will not be dumped into storm drains or onto soil or pavement that carries stormwater runoff. A wash down area for equipment and concrete trucks will be designated and the use of thinners and solvents to wash oil, grease, or similar substances from heavy machinery or machine parts will be prohibited.
- WSDOT will obtain a NPDES (National Pollutant Discharge Elimination System) permit and will conduct a regular program of testing and lab work to ensure that water encountered during construction meets the water quality standards specified in the NPDES permit.
- WSDOT will to meet the NPDES water quality standards prior to the discharge of the encountered water to a surface water body, such as Kelsey Creek. If necessary, water quality will be improved, such as by using sediment ponds to allow sediment to settle out prior to discharge.
- If it is necessary to install seepage drains to control seepage for retaining walls and fill embankments, WSDOT will include special provisions in the design to discharge drain flow back into affected areas, including wetlands.

Measures for Water Quality

In addition to measures for geology, soils, groundwater, and for hazardous materials that are protective of water quality, the following measures would be implemented for water quality.

- WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses.
- Washout from concrete trucks will not be dumped into storm drains or onto soil or pavement that carries stormwater runoff.
- Thinners and solvents will not be used to wash oil, grease, or similar substances from heavy machinery or machine parts.
- WSDOT will designate a wash down area for equipment and concrete trucks.

Measures for Wetlands

- WSDOT will protect, preserve, and enhance wetlands in the project area during the planning, construction, and operation of transportation facilities and projects consistent with USDOT Order 5660.1A, Executive Order 11990, and Governor's Executive Orders EO 89-10 and EO 90-04.
- WSDOT's project-level design and environmental review has included avoidance, minimization, restoration, and compensation of wetlands. WSDOT will implement these measures prior to or concurrent with adverse effects on wetlands, to reduce temporal losses of wetland functions.
- WSDOT will follow guidance contained in the wetlands section of the WSDOT Environmental Procedures Manual (WSDOT 2004a), which outlines the issues and actions to be addressed prior to authorizing work that could affect wetlands.
- WSDOT will use high-visibility fencing to clearly mark wetlands to be avoided in the construction area.

Measures for Upland Vegetation and Wildlife

- WSDOT will ensure mitigation measures established in the I-405 Corridor EIS will be implemented on the Bellevue Nickel Improvement Project.
- WSDOT will prepare and implement a revegetation plan. In addition, areas with mixed forest will not be removed for temporary use (i.e., construction staging). If an area of mixed forest must be removed for roadway construction, it will be replaced with plantings of native tree and shrub species within the affected area.
- WSDOT will adhere to project conditions identified in the Biological Assessment and agency concurrence letters.
- WSDOT will limit construction activity to a relatively small area immediately adjacent to the existing roadway to minimize vegetation clearing and leave as many trees as possible.

Measures for Fisheries and Aquatic Resources

- WSDOT will implement construction BMPs (such as silt fencing or sedimentation ponds) to avoid disturbing sensitive areas during the development and use of any staging areas, access roads, and turnouts associated with resurfacing activities.
- WSDOT will not allow in-water work to occur except during seasonal work windows established to protect fish.
- WSDOT will require that all stormwater treatment wetland/detention facilities are sited and constructed at a sufficient distance from named and unnamed streams so no grading or filling in the streams or the streamside zones will be required.

Measures for Air Quality

- WSDOT will require preparation and implementation of a Fugitive Dust Control Plan in accordance with the Memorandum of Agreement between WSDOT and PSCAA Regarding Control of Fugitive Dust from Construction Projects (October 1999).
- During dry weather, exposed soil will be sprayed with water to reduce emissions of and deposition of particulate matter (PM₁₀).
- WSDOT will provide adequate freeboard (space from the top of the material to the top of the truck), cover truckloads, and, in dry weather, wet materials in trucks to reduce emission of and deposition of particulate matter during transport.
- WSDOT use wheel washers to remove particulate matter that would otherwise be carried offsite by vehicles to decrease deposition of particulate matter on area roadways.
- WSDOT will remove particulate matter deposited on public roads to reduce mud on area roadways.
- WSDOT will cover or spray with water any dirt, gravel, and debris piles during periods of high wind when the stockpiles are not in use to control dust and transmissions of particulate matter.
- WSDOT will route and schedule construction trucks to reduce travel delays and unnecessary fuel consumption during peak travel times, and therefore reduce secondary air quality impacts (i.e. emissions of carbon monoxide and nitrogen oxides) that result when vehicles slow down to wait for construction trucks.

Measures for Noise

- Noise berms and barriers will be erected prior to other construction activities to provide noise shielding.
- The noisiest construction activities, such as pile driving, will be limited to between 7 AM and 10 PM to reduce construction noise levels during sensitive nighttime hours.
- Construction equipment engines will be equipped with adequate mufflers, intake silencers, and engine enclosures.
- Construction equipment will be turned off during prolonged periods of nonuse to eliminate noise.
- All equipment will be maintained appropriately and equipment operators will be trained in good practices to reduce noise levels.
- Stationary equipment will be stored away from receiving properties to decrease noise.
- Temporary noise barriers or curtains will be constructed around stationary equipment that must be located close to residences.
- Resilient bed liners will be required in dump trucks to be loaded on site during nighttime hours.

- WSDOT use Occupational Safety and Health Administration (OSHA)-approved ambient sound-sensing backup alarms that would reduce disturbances during quieter periods.

Measures for Hazardous Materials

Known or Suspected Contamination within the Build Alternative Right of Way

- WSDOT will prepare an SPCCP that provides specific guidance for managing contaminated media that may be encountered within the right of way (ROW).
- WSDOT may be responsible for remediation and monitoring of any contaminated properties acquired for this project. WSDOT will further evaluate the identified properties before acquisition or construction occurs. Contamination in soils will be evaluated relative to the Model Toxics Control Act (MTCA).
- If WSDOT encounters an underground storage tank (UST) within the ROW, WSDOT will assume cleanup liability for the appropriate decommissioning and removal of USTs. If this occurs, WSDOT will follow all applicable rules and regulations associated with UST removal activities.
- WSDOT will conduct thorough asbestos-containing material/lead paint building surveys by an Asbestos Hazard Emergency Response Act (AHERA)-certified inspector on all property structures acquired or demolished. WSDOT will properly remove and dispose of all asbestos-containing material/lead-based paint in accordance with applicable rules and regulations.
- Construction waste material such as concrete or other harmful materials will be disposed of at approved sites in accordance with Sections 2-01, 2-02, and 2-03 of the WSDOT Standard Specifications.
- WSDOT may acquire the responsibility for cleanup of any soil or groundwater contamination encountered during construction (that must be removed from the project limits) within WSDOT ROW. Contamination will be evaluated relative to Model Toxics Control Act (MTCA) cleanup levels.
- WSDOT will consider entering into pre-purchaser agreements for purpose of indemnifying itself against acquiring the responsibility for any long-term cleanup and monitoring costs.
- All regulatory conditions imposed at contaminated properties (e.g., Consent Decree) associated with construction will be met. These conditions could include ensuring that the surrounding properties and population are not exposed to the contaminants on the site: i.e., WSDOT will ensure that the site is properly contained during construction so that contaminants do not migrate offsite, thereby protecting the health and safety of all on-site personnel during work at the site.

Known or Suspected Contamination Outside of the Right of Way

- Contaminated groundwater originating from properties located up-gradient of the ROW could migrate to the project area. WSDOT generally will not incur liability for groundwater contamination that has migrated into the project footprint as long as the agency does not

acquire the source of the contamination. However, WSDOT will manage the contaminated media in accordance with all applicable rules and regulations.

Unknown Contamination

- If unknown contamination is discovered during construction, WSDOT will follow the SPCCP as well as all appropriate regulations.

Worker and Public Health and Safety and other Regulatory Requirements

The WSDOT will comply with the following regulations and agreements:

- State Dangerous Waste Regulations (Chapter 173-303 WAC);
- Safety Standards for Construction Work (Chapter 296-155 WAC);
- National Emission Standards for Hazardous Air Pollutants (CFR, Title 40, Volume 5, Parts 61 to 71);
- General Occupational Health Standards (Chapter 296-62 WAC); and
- Implementing Agreement between Ecology and WSDOT Concerning Hazardous Waste Management (April 1993).

Hazardous Materials Spills During Construction

- WSDOT will prepare and implement a SPCCP to minimize or avoid effects on human health, soil, surface water and groundwater.

Measures for Traffic and Transportation

- WSDOT will coordinate with local agencies and other projects to prepare and implement a Traffic Management Plan (TMP) prior to making any changes to the traffic flow or lane closures. WSDOT will inform the public, school districts, emergency service providers, and transit agencies of the changes ahead of time through a public information process. Pedestrian and bicycle circulation will be maintained as much as possible during construction.
- Prior to and during construction, WSDOT will implement strategies to manage the demand on transportation infrastructure. These transportation demand management strategies will form an important part of the construction management program and will be aimed at increasing public awareness and participation in HOV travel. The major focus will be on expanding vanpooling and van-share opportunities. Other elements of the transportation demand management plan may include:
 - increased HOV awareness and public information, and
 - work-based support and incentives.

Measures for Visual Quality

- WSDOT will follow the I-405 Urban Design Criteria. Where the local terrain and placement of light poles allow, the WSDOT will reduce light and glare effects by shielding roadway lighting and using downcast lighting so light sources will not be directly visible from residential areas and local streets.
- WSDOT will restore (revegetate) construction areas in phases rather than waiting for the entire project to be completed.

Measures for Neighborhoods, Businesses, Public Services and Utilities

- WSDOT will prepare and implement a transportation management plan (TMP). If local streets must be temporarily closed during construction, WSDOT will provide detour routes clearly marked with signs.
- WSDOT will coordinate with school districts before construction.
- WSDOT will implement and coordinate the TMP with all emergency services prior to any construction activity.
- WSDOT will coordinate with utility providers prior to construction to identify conflicts and resolve the conflicts prior to or during construction. Potential utility conflicts within WSDOT ROW will be relocated at the utility's expense prior to contract award.
- WSDOT will prepare a consolidated utility plan consisting of key elements such as existing locations, potential temporary locations and potential new locations for utilities; sequence and coordinated schedules for utility work; and detailed descriptions of any service disruptions. This plan will be reviewed by and discussed with affected utility providers prior to the start of construction.
- WSDOT will field verify the exact locations and depths of underground utilities prior to construction.
- WSDOT will notify neighborhoods of utility interruptions by providing a scheduled of construction activities in those areas.
- WSDOT will coordinate with utility franchise holders and provide them with project schedules to minimize the effects of utility relocations (for example, equipment procurement times, relocation ahead of construction, etc.)
- WSDOT will notify and coordinate with fire departments for water line relocations that may affect water supply for fire suppression, and establish alternative supply lines prior to any breaks in service; and to ensure that fire departments can handle all calls during construction periods and to alleviate the potential for increased response times.
- WSDOT will notify and coordinate with police departments to implement crime prevention principles and to ensure that they have adequate staffing to provide traffic and pedestrian control.

- WSDOT will maintain access to businesses throughout the construction period through careful planning of construction activities and an awareness of the needs to provide adjacent properties with reasonable access during business hours. As part of construction management, WSDOT will prepare access measures. WSDOT will make provisions for posting appropriate signs to communicate the necessary information to potential customers.
- WSDOT will keep daytime street closures to a minimum to provide access for businesses during regular business hours.

Measures for Cultural Resources

- WSDOT will prepare an Unanticipated Discovery Plan for the project that WSDOT will follow. This will avoid or minimize unanticipated effects to historic, cultural, and archaeological resources.

Project Measures to Avoid or Minimize Effects During Project Operation

The following sections describe the measures that WSDOT will implement during project operation.

Measures for Surface Waters and Water Quality

- WSDOT will follow the Highway Runoff Manual for both the design and implementation of stormwater facilities. WSDOT is not required to manage flow where drainage is directly to Mercer Slough. Where drainage is to a tributary to Mercer Slough, WSDOT will construct a stormwater management system that does provide flow control.

Measures for Fisheries and Aquatic Resources

- WSDOT will compensate for adverse effects to fish habitat and aquatic resources by providing in-kind mitigation. This in-kind mitigation will take the form of on-site, off-site, or a combination of on- and off-site mitigation.
- Off-site mitigation could include planting native riparian vegetation outside of the study area in areas where restoring native riparian buffers may have a greater benefit to fish and aquatic species. Mitigation could be concentrated along streams with high fish use where important stream processes and functions related to riparian buffers (for example, large woody debris [LWD] recruitment levels, litter fall, and bank stabilization) are impaired.
- On-site/off-site mitigation could include installing in-stream habitat features (for example, boulders or LWD) in the streambed downstream of the project footprint to increase the habitat complexity of the affected waterbody.

- Ongoing maintenance (during and post-construction) of stormwater treatment and detention facilities by WSDOT will not include the application of any chemical weed control agents (e.g., herbicides).

Measures for Upland Vegetation and Wildlife

- WSDOT will replace areas of mixed forest that will be permanently removed for roadway construction with plantings of native tree and shrub species within the affected area.

Appendix B

Consultation with the City of Bellevue



Corridor Program

Congestion Relief & Bus Rapid Transit Projects

600 -- 108th Avenue NE, Suite 405
Bellevue, WA 98004
Main 425-456-8500
Fax 425-456-8600

December 5, 2005

Kim Becklund
City of Bellevue
Transportation Division 301 116th Avenue SE, Suite 100
Bellevue, WA 98004

Re: Bellevue Nickel Improvement Project Wetland Mitigation at Kelsey Creek Park

Dear Ms. Becklund:

WSDOT appreciates that the City of Bellevue, including Bellevue Parks and Recreation, has provided a site for wetland mitigation for the I-405 Bellevue Nickel Improvement Project. The intent of this letter is to 1) document our intent to use the City property for the I-405 wetland mitigation site, 2) outline commitments WSDOT will make and information we will need from the City, and 3) propose how WSDOT and the City can proceed with finalizing a terms agreement.

Construction on the Bellevue Nickel Improvement Project will result in unavoidable effects to I-405 right-of-way wetlands in Median Creek. WSDOT will mitigate for the unavoidable effects through compensatory mitigation at an offsite location. The wetland creation area will be located within the Kelsey Creek Park, immediately north of the intersection of Richards Road and the Lake Hills Connector. The land is owned by the City of Bellevue and managed by its Parks Department. The creation of the wetland mitigation site will be used solely to mitigate for wetland impacts from WSDOT's I-405 transportation projects that occur within the Bellevue city limits.

The Kelsey Creek wetland complex currently surrounds the proposed wetland creation site on the north, east, and west. The mitigation site, approximately 3.6 acres, is an apparent historic fill site which appears to have been filled prior to the enactment of federal, state, or local wetland regulations. The depth of fill appears to range between one and eight feet, with the deepest fill occurring along Lake Hills Connector. Non-native pasture grasses and shrubs primarily dominate the fill area. Small, forested patches occur along the roadway near the western and eastern extents of the proposed wetland creation area. There are no existing structures on site.

WSDOT has secured full funding for the I-405 Bellevue Nickel Improvement Project which includes the construction of the mitigation site. The proposed work at the mitigation site will remove fill from the site and enhance wetland functions that are consistent with the Park. The construction of the mitigation site will use the design-build method of contracting.



WSDOT is currently developing a Wetland Mitigation Plan. This plan will be designed to allow for applicable wetland permitting and will include a maintenance and monitoring program. The plan will provide information on the following:

- Project Description, including mitigation approach and wetland summary (wetland descriptions and impact summary),
- Proposed Compensatory Mitigation (mitigation site evaluation, mitigation ratios, site-specific mitigation goals),
- Mitigation Area Background Information,
- Mitigation Strategy, and
- Construction and Planting Schedules.

WSDOT will provide annual reports to the City. The annual report will include progress on the baseline conditions, field pictures of the mitigation site, success rates of planting, and documentation of any invasive vegetation on site.

WSDOT will need the following from the City to ensure success of the establishment of the wetland mitigation site:

- Grant and convey to WSDOT right of entry on the property for the purpose of constructing and maintaining a wetland mitigation site through the "establishment" period;
- Confirm that no City of Bellevue permits are required for the wetland mitigation site; and
- Agree to a deed restriction or protection easement to protect this site in perpetuity.

WSDOT may need other information from the City as we proceed with the project.

In previous discussions, we have talked about incorporating the Newcastle Beach Project and Kelsey Creek mitigation site into one Memorandum of Agreement between WSDOT and the City of Bellevue. Since the mitigation site is farther into development than the Newcastle Beach Project, I would recommend that we immediately begin working on the terms agreement for the mitigation site. When WSDOT and the City have reached agreement on the concept plan for Newcastle, we could then create specific terms for that project. Ideally, we would include the terms for both projects into one Memorandum of Agreement that works with both project's schedules. However, we may be in a position to finalize terms on the wetland mitigation site before we can do so for the Newcastle Beach Project.

This mitigation site will provide many environmental benefits to both our project and the City of Bellevue. WSDOT looks forward to continued opportunities for partnering on environmental mitigation projects. If you have any questions or comments regarding the approach we have laid out for the terms agreement, please let me know by December 18, 2005 so that we are able to maintain the project's schedule.

Thank you for all of your help in making this project a win-win environmental improvement. I look forward to finalizing the design with you and your staff.

Sincerely,



Allison Ray, Environmental Manager
WSDOT, I-405 Project
425-456-8610
rayalli@wsdot.wa.gov

cc: Denise Cieri
Chad Durand
Robin Sterry
Pat Svoboda